

### **South Coast Air Quality Management District**

## Engineering & Compliance

Policies & Procedures

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT MEMORANDUM

**DATE:** October 19, 1987

**TO:** Combustion Unit Engineers

**FROM:** Mark Y. Liu, Acting Supervisor /s/ Mark

**SUBJECT:** Processing Applications for Hexavalent Chronium Tanks

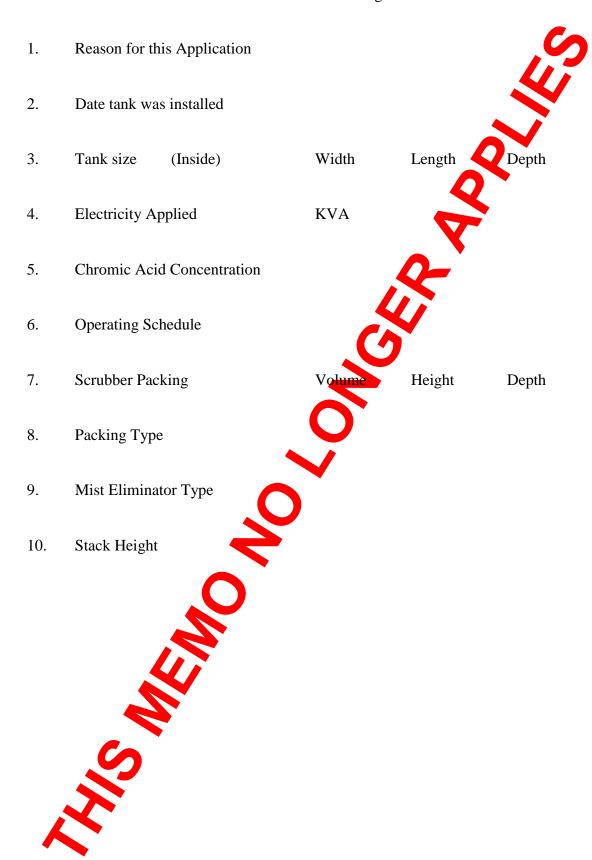
We need to take following prompt actions for those Cr+6 tanks that were installed without a Permit to Construct.

- 1. Gather the process data as shown on the attached list and use the attached test data to estimate the uncontrolled Cr+6 emissions from the tank.
- 2. Gather the information on the scrubber as in the attached list) to estimate the control efficiency of the scrubber (if any).
- 3. Estimate the maximum individual cancer risk by using the screening method in proposed Rule 223.
- 4. Follow all the guidelines in my 9/18/87 memo (attached) to process the application.

Please do not hesitate to recommend denials if you find the risk is over 10 in a million, which I suspect will be the case for many.

myl.memo 1019 cc: Marty Kay

### Essential Data For Processing Cr+6 Tanks



#### Hexavalent Chromium Emissions<sup>a</sup> From Chrome Plating Operations

	Uncontrolled (gr/hr)	Controlled (gr/hr)	Current (amps)	Surface Area (ft <sup>2</sup> )	Plating Type
Able Machine	76	1.2 <sup>b</sup>	6,387	56	Hard
Steel Heddle	47	1.3°	3,447	72.5	Hard
Greensboro Ind.	29.1	$3.8^{d}$	6,223	63	Hard
Carolina Plating	23.6	1.7 <sup>e</sup>	11,276	92	Hard
Naval-Long Beach <sup>f</sup>	9.0	$0.77^{g}$	4,275	119	Hard
Naval-Virginia	9.2	0.45 <sup>h</sup>	2,480	NA	Hard
Pamarco	4.1	2.3 <sup>i</sup>	2,300	55	Hard
C.S. Ohm Mfg.	$0.219^{j}$	0.043	23,707	45	Dec.
Tarby	9.97	0.299 <sup>k</sup>	7,000	106.5	Hard
Plato Products	$0.0189^{l}$	0.0077 <sup>m</sup>	1,300	15	Hard

- a. Data reported as total chrome were considered hexavalent chromium
- b. With dual mist eliminator
- c. With packed-bed scrubber
- d. With mist eliminator
- e. With packed-bed scrubber
- f. Assume emissions from one decorative chrome tank is negligible compared to other three hard chrome tanks
- g. With packed-bed scrubber
- h. With mist eliminator
- i. With packed bed scrubber
- j. Data from impinger train
- k. With cross-flow packed bed scrubber, 1-ft. packing, and 8-in. Chevron mist eliminator
- 1. With ¼ -in. polyethylene balls floating on solution surface
- m. With cross-flow packed-bed scrubber, 6-ft packing, 8-in. sine-wave mist eliminator, and Kimre filter.